I. Sinus Iridum,
K. Mare Nubium,
L. Mare Frigoris,
T. Leibnitz Mountains,
U. Doerfel Mountains,
V. Rook Mountains,
W. D'Alembert Mountains,
X. Apennines,
Y. Caucasus,
Z. Alps.

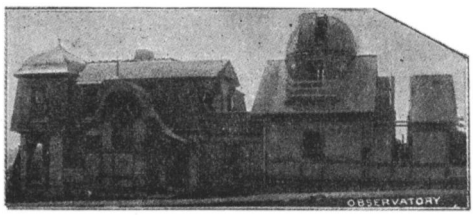
THE PRINCIPAL LUNAR CRATERS.

1. Clavius,
2. Schiller,
3. Maginus,
4. Schickard,
5. Tycho,
6. Walther,
7. Purbach,
8. Petavius,
9. "The Railway,"
10. Arzachel,
11. Gassendi,
12. Catherina,
13. Cyrillus,
14. Alphonsus,
15. Theopilus,
16. Ptolemy,
17. Langrenus,
18. Hipparchus,
19. Grimaldi,
20. Flamsteed,
21. Messier,
22. Maskelyne,
23. Triesnecker,
24. Kepler,
25. Copernicus,
26. Stadius.
27. Erathosthenes,
28. Proclus,
28A. Pliny,
29. Aristarchus,
30. Herodotus,
31. Archimides,
32. Cleomedes,
33. Aristillus,
34. Eudoxus,
35. Plato,
36. Aristotle,
37. Endymion.

THE OBSERVATORY OF SWARTHMORE COLLEGE.

By Miss Susan J. Cunningham, Director.

In consequence of a growing need felt in the teaching of Astronomy here at Swarthmore College, for some suitable apparatus for



illustrating the methods of finding Latitude, Time, etc., it was determined, about five years ago, to make an effort to secure a small observatory equipped with instruments for teaching purposes. It was thought that, perhaps, a sum of $2000 would cover the cost of the necessary apparatus, and suitably house it; in consequence of this, a committee from the Board of Managers of the College was appointed to see what might be done in the way of obtaining subscriptions to the enterprise. The result was that a sum of about

$7000 was obtained, with which a neat building was constructed of wood, containing a central dome, in which is placed the equatorial telescope; and the two wings, one for the transit instrument and mean-time clock, and the other for a work-room. The latter has been suitably warmed from the professor's house adjoining; in this room the nucleus of a library is placed with the batteries, chronograph and chronometer. On the ground floor of the central building is placed the sidereal clock.

In the dome stands a six-inch refractor, with object-glass by ALVAN CLARK & SONS, and mounting by WARNER & SWASEY; it is provided with clock-work, and an attachment for the electrical illumination of the circles and micrometer. There are five eye-pieces, varying in power from 75 to 500, a large eye-piece for the moon, and a diagonal eye-piece for both sun and stars, and also a micrometer. There is also a very fine spectroscope, with a ROWLAND grating, constructed by BRASHEAR, but no photographic apparatus.

The transit instrument with 3½-inch object-glass is also of WARNER & SWASEY'S mounting, and stands upon a foundation of solid mason work of about twelve feet in depth; it is provided with two large finding circles, one roughly graduated, and the other graduated upon silver to 10″ of arc, and carrying two verniers, a striding level, and also a level attached to the horizontal axis of the telescope; to the eye-piece is attached a micrometer, capable of being turned one-quarter around, in order that, with the second level, the instrument may be used as a zenith telescope, as well as a transit instrument. The chronograph is also of WARNER & SWASEY'S make, and can be connected with either clock. A barometer, wet and dry bulb thermometers, also a maximum and minimum thermometer, made by H. J. GREEN, of New York, were added about two years ago, and observations are recorded three times daily, in connection with the Pennsylvania State Weather Service (the observatory being a volunteer station.) A rain-gauge and anemometer, with registering clock, are also among the meteorological outfit, and during the present year a DRAPER'S self-registering thermometer has been added. The U. S. Signal Service weather flags are displayed daily, according to the data announced by the service, and a weather map is received and placed on view each day.

As yet the observatory, according to its original design, has been used for teaching purposes only, and for the pleasure of visitors, but it is hoped that, in time, astronomical work may be done here.